

**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop Amendment; Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on the below date:
Date: August 2, 2006 Name: Heidi A. Dare, Reg. No. 50,775 Signature: Heidi A. Dare

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Claudia Lange et al.

Appln. No.: 10/575,961

Filed: April 13, 2006

For: Blood Products from Mesenchymal Stem Cells

Attorney Docket No: 12103-9

BRINKS
HOFER
GILSON
& LIONE

Examiner: To Be Assigned

Art Unit: To Be Assigned

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

Sir:

Attached is/are:

Information Disclosure Statement; Form PTO-1449; copies of references A4-A30
 Return Receipt Postcard

Fee calculation:

No additional fee is required.
 Small Entity.
 An extension fee in an amount of \$ _____ for a _____-month extension of time under 37 C.F.R. § 1.136(a).
 A petition or processing fee in an amount of \$ _____ under 37 C.F.R. § 1.17(______).
 An additional filing fee has been calculated as shown below:

	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Small Entity		Not a Small Entity		
					Rate	Add'l Fee	or	Rate	Add'l Fee
Total		Minus			x \$25=			x \$50=	
Indep.		Minus			x 100=			x \$200=	
First Presentation of Multiple Dep. Claim					+\$180=			+\$360=	
					Total	\$	Total	\$0	

Fee payment:

A check in the amount of \$ _____ is enclosed.
 Please charge Deposit Account No. 23-1925 in the amount of \$ _____. A copy of this Transmittal is enclosed for this purpose.
 Payment by credit card in the amount of \$ _____ (Form PTO-2038 is attached).
 The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this paper (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

August 2, 2006

Date

Heidi A. Dare
Heidi A. Dare (Reg. No. 50,775)

BRINKS HOFER GILSON & LIONE
NBC Tower – Suite 3600, 455 N. Cityfront Plaza Drive, Chicago, IL 60611-5599



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INFORMATION DISCLOSURE STATEMENT

In accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98, and more particularly in accordance with 37 C.F.R. §1.97(b), Applicants hereby cite the following references:

No.	Date	Applicant or Country (if foreign)
2002-0064519 A1	05/2002	Bruder et al.
5,736,396	04/1998	Bruder et al.
5,942,225	08/1999	Bruder et al.
WO 99/61588 A1	12/1999	WIPO
WO 03/070922 A1	08/2003	WIPO
WO 05/015151 A2	02/2005	WIPO
WO 05/042019 A1	05/2005	WIPO
Deng et al., "In Vitro Differentiation of Human Marrow Stromal Cells into Early Progenitors of Neural Cells by Conditions That Increase Intracellular Cyclic AMP;" 2001, <i>Biochem. Biophys. Res. Commun.</i> , 282(1):148-52.		
Drouet, M. et al.; "Mesenchymal stem cells rescue CD34+ cells from radiation-induced apoptosis and sustain hematopoietic reconstitution after coculture and cogenesis in lethally irradiated baboons: is autologous stem cell therapy in nuclear accident settings hype or reality?," <i>Bone Marrow Transplant</i> ; 2005 June; 35(12):1201-9. Abstract.		
Fukuda, K, 2001, <i>Artif. Organs</i> , 25(3):187-93.		
Graca Almeida-Porada, M. et al.; "[3292] Clonally Derived Marrow Stromal Cells (MSC) Populations Are Able to Differentiate into Blood, Liver, and Skin Cells"; American Society of Hematology 43 rd Annual Meeting and Exposition, December 7-11, 2001, Orlando, Florida. Abstract.		
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Graca Almeida-Porada, M. et al.; "A large animal noninjury model for study of human stem cell plasticity;" <i>Blood Cells, Molecules, and Diseases</i> 32 (2004) 77-81.		

Hofstetter, C.P. et al.; "Marrow stromal cells from guiding strands in the injured spinal cord and promote recovery;" PNAS, vol. 99, no. 4; February 19, 2002; 2199-2204.
Huss, R. et al.; "Evidence of Peripheral Blood-Derived, Plastic-Adherent CD34 ^{low} Hematopoietic Stem Cell Clones with Mesenchymal Stem Cell Characteristics;" Stem Cells 2000;18:252-260.
Hu, Ying et al: "Transplantation of mesenchymal stem cells followed by G-CSF injection can reconstitute hematopoiesis of lethally irradiated BALB/C mice" Blood, vol. 98, no. 11 Part 2, 16 November 2001(2001-11-16), page 316b, XP009042610 & 43rd Annual Meeting Of The American Society Of Hematology, Part 2; Orlando, Florida, USA; December 07-11, 2001 ISSN: 0006-4971. Abstract.
Jaiswal, N et al., 1997, <i>J. Cell Biochem.</i> , 64(2):295-312.
Jiang Yeuhua et al.: "Pluripotency of mesenchymal stem cells dreived from adult marrow" <i>Nature (London)</i> , vol. 418, no. 6893, 4 July 2002 (2002-07-04), pages 41-49, XP001204372 ISSN: 0028-0836.
Lange, C. et al.; "Hematopoietic Reconstitution of Syngeneic Mice with a Peripheral Blood-Derived, Monoclonal CD34 ⁺ , Sca-1 ⁺ , Thy-1 ^{low} , c-kit ⁺ Stem Cell Line;" <i>Journal of Hematology & Stem Cell Research</i> 8:335-342 (1999).
Mourcin, F. et al.; "Mesenchymal Stem Cells Support Expansion of In Vitro Irradiated CD34(+) Cells in the Presence of SCF, FLT3 Ligand, TPO and IL3: Potential Application to Autologous Cell Therapy in Accidentally Irradiated Victims;" 1: <i>Radiat Res.</i> ; 2005 Jul; 164(1):1-9. Abstract.
Osawa M. et al: "Long-term lymphohematopoietic reconstitution by a single CD34 low/negative hematopoietic stem cell" <i>Science</i> , American Association For The Advancement Of Science, US, vol. 273, no. 5272, 12 July 1996 (1996-07-12), pages 242-245, XP002097289 ISSN: 0036-8075.
Pei X: "Who is hematopoietic stem cell: CD34+ or CD34-?" <i>International Journal Of Hematology</i> Dec 1999, vol. 70, no. 4, December 1999 (1999-12), pages 213-215, XP009042521 ISSN: 0925-5710.
Pei Xuetao: "Stem cell engineering: The new generation of cellular therapeutics" <i>International Journal Of Hematology Suppl. I</i> , vol. 76, August 2002 (2002-08), pages 155-156, XP009042425. Abstract.
Pittenger, MF et al., <i>Science</i> . 1999 Apr 2;284(5411):143-7.
Reyes Morayma et al: "Origin of endothelial progenitors in human post-natal bone marrow" <i>Blood</i> , vol. 98, no. 11 Part 1, 16 November 2001 (2001-11-16), page 821a, XP002313288 & 43rd Annual Meeting Of The American Society Of Hematology, Part 1; Orlando, Florida, USA; December 07-11, 2001 ISSN: 0006-4971. Abstract.
Shakibaei, M et al., 1997, <i>Cell Biol. Int.</i> , 21(2):115-25
Thierry, D. et al.; "Cell therapy for the treatment of accidental radiation overexposure;" 1: <i>BJR Suppl.</i> 2005; 27:175-9.
Toma, C et al., 2002, <i>Circulation</i> , 105(1):93-8.
Woodbury et al., 2000, <i>J. Neurosci. Res.</i> , 61(4):364-70.
Zhao Z. et al.; "Establishment and properties of fetal dermis-derived mesenchymal stem cell lines: plasticity in vitro and hematopoietic protection in vivo;" 1: <i>Bone Marrow Transplant</i> ; 2005 Jun 20; [Epub ahead of print]. Abstract.

Applicants are enclosing Form PTO-1449 (three sheets), along with a copy of each listed reference for which a copy is required under 37 C.F.R. §1.98(a)(2). As each

of the listed references is in English, no further commentary is believed to be necessary, 37 C.F.R. § 1.98(a)(3). Applicants respectfully request the Examiner's consideration of the above references and entry thereof into the record of this application.

By submitting this Statement, Applicants are attempting to fully comply with the duty of candor and good faith mandated by 37 C.F.R. § 1.56. As such, this Statement is not intended to constitute an admission that any of the enclosed references, or other information referred to therein, constitutes "prior art" or is otherwise "material to patentability," as that phrase is defined in 37 C.F.R. § 1.56(a).

Applicants have calculated no fee to be due in connection with the filing of this Statement. However, the Director is authorized to charge any fee deficiency associated with the filing of this Statement to a deposit account, as authorized in the Transmittal accompanying this Statement.

Respectfully submitted,

August 2, 2006

Date

Heidi A. Dare

Heidi A. Dare (Reg. No. 50,775)



FORM PTO-1449	SERIAL NO. 10/575,961	CASE NO. 12103-9
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (use several sheets if necessary)	FILING DATE April 13, 2006	GROUP ART UNIT To Be Assigned
APPLICANTS: Claudia Lange et al.		

REFERENCE DESIGNATION **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER Number-Kind Code (If known)	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
A1	2002-0064519 A1	05/2002	Bruder et al.		
A2	5,736,396	04/1998	Bruder et al.		
A3	5,942,225	08/1999	Bruder et al.		

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER Number-Kind Code (If known)	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES OR NO
A4	WO 99/61588 A1	12/1999	WIPO		
A5	WO 03/070922 A1	08/2003	WIPO		
A6	WO 05/015151 A2	02/2005	WIPO		Yes (Abstract)
A7	WO 05/042019 A1	05/2005	WIPO		

EXAMINER INITIAL	OTHER ART – NON PATENT LITERATURE DOCUMENTS	
	(Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.)	
A8	Deng et al., "In Vitro Differentiation of Human Marrow Stromal Cells into Early Progenitors of Neural Cells by Conditions That Increase Intracellular Cyclic AMP;" 2001, <i>Biochem. Biophys. Res. Commun.</i> , 282(1):148-52.	
A9	Drouet, M. et al.; "Mesenchymal stem cells rescue CD34+ cells from radiation-induced apoptosis and sustain hematopoietic reconstitution after coculture and cogenesis in lethally irradiated baboons: is autologous stem cell therapy in nuclear accident settings hype or reality?," <i>Bone Marrow Transplant</i> ; 2005 June; 35(12):1201-9. Abstract.	
A10	Fukuda, K, 2001, <i>Artif. Organs</i> , 25(3):187-93.	
A11	Graca Almeida-Porada, M. et al.; "[3292] Clonally Derived Marrow Stromal Cells (MSC) Populations Are Able to Differentiate into Blood, Liver, and Skin Cells"; American Society of Hematology 43 rd Annual Meeting and Exposition, December 7-11, 2001, Orlando, Florida. Abstract.	
A12	Graca Almeida-Porada, M. et al.; "[2979] Human Marrow Stromal Cells (MSC) Represent a Latent Pool of Stem Cells Capable of Generating Long-Term Hematopoietic Cells;" American Society of Hematology 43 rd Annual Meeting and Exposition, December 7-11, 2001, Orlando, Florida. Abstract.	

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	A13	Graca Almeida-Porada, M. et al.; "A large animal noninjury model for study of human stem cell plasticity;" <i>Blood Cells, Molecules, and Diseases</i> 32 (2004) 77-81.
	A14	Hofstetter, C.P. et al.; "Marrow stromal cells from guiding strands in the injured spinal cord and promote recovery;" <i>PNAS</i> , vol. 99, no. 4; February 19, 2002; 2199-2204.
	A15	Huss, R. et al.; "Evidence of Peripheral Blood-Derived, Plastic-Adherent CD34 ^{-/low} Hematopoietic Stem Cell Clones with Mesenchymal Stem Cell Characteristics;" <i>Stem Cells</i> 2000;18:252-260.
	A16	Hu, Ying et al: "Transplantation of mesenchymal stem cells followed by G-CSF injection can reconstitute hematopoiesis of lethally irradiated BALB/C mice" <i>Blood</i> , vol. 98, no. 11 Part 2, 16 November 2001(2001-11-16), page 316b, XP009042610 & 43rd Annual Meeting Of The American Society Of Hematology, Part 2; Orlando, Florida, USA; December 07-11, 2001 ISSN: 0006-4971. Abstract.
	A17	Jaiswal, N et al., 1997, <i>J. Cell Biochem.</i> , 64(2):295-312.
	A18	Jiang Yeuhua et al.: "Pluripotency of mesenchymal stem cells dreived from adult marrow" <i>Nature (London)</i> , vol. 418, no. 6893, 4 July 2002 (2002-07-04), pages 41-49, XP001204372 ISSN: 0028-0836.
	A19	Lange, C. et al.; "Hematopoietic Reconstitution of Syngeneic Mice with a Peripheral Blood-Derived, Monoclonal CD34 ⁺ , Sca-1 ⁺ , Thy-1 ^{low} , c-kit ⁺ Stem Cell Line;" <i>Journal of Hematology & Stem Cell Research</i> 8:335-342 (1999).
	A20	Mourcin, F. et al.; "Mesenchymal Stem Cells Support Expansion of In Vitro Irradiated CD34(+) Cells in the Presence of SCF, FLT3 Ligand, TPO and IL3: Potential Application to Autologous Cell Therapy in Accidentally Irradiated Victims;" 1: <i>Radiat Res.</i> ; 2005 Jul; 164(1):1-9. Abstract.
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	A23	Pei Xuetao: "Stem cell engineering: The new generation of cellular therapeutics" <i>International Journal Of Hematology Suppl. I</i> , vol. 76, August 2002 (2002-08), pages 155-156, XP009042425. Abstract.
	A24	Pittenger, MF et al., <i>Science</i> . 1999 Apr 2;284(5411):143-7.
	A25	Reyes Morayma et al: "Origin of endothelial progenitors in human post-natal bone marrow" <i>Blood</i> , vol. 98, no. 11 Part 1, 16 November 2001 (2001-11-16), page 821a, XP002313288 & 43rd Annual Meeting Of The American Society Of Hematology, Part 1; Orlando, Florida, USA; December 07-11, 2001 ISSN: 0006-4971. Abstract.
	A26	Shakibaei, M et al., 1997, <i>Cell Biol. Int.</i> , 21(2):115-25

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	A27	Thierry, D. et al.; "Cell therapy for the treatment of accidental radiation overexposure;" 1: BJR Suppl. 2005; 27:175-9.
	A28	Toma, C et al., 2002, Circulation, 105(1):93-8.
	A29	Woodbury et al., 2000, J. Neurosci. Res., 61(4):364-70.
	A30	Zhao Z. et al.; "Establishment and properties of fetal dermis-derived mesenchymal stem cell lines: plasticity in vitro and hematopoietic protection in vivo;" 1: Bone Marrow Transplant; 2005 Jun 20; [Epub ahead of print]. Abstract.

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